

I Claim:

1. A mechanical arm comprising:

a base;

a first linkage pivotally attached to said base at a first pivot;

a second linkage pivotally attached to said first linkage at a second pivot;

a first spring attached between an anchor point defined on said first linkage and said first pivot; and

a second spring attached between an anchor point defined on said second linkage and said second pivot.

2. The arm of Claim 1 wherein said first and said second pivots comprise:

a first axel and a second axel respectively; and

a first ring disposed around said first axel and a second ring disposed around said second axel;

wherein said springs are attached to said pivots via an attachment to said rings.

3. The arm of Claim 2 further comprising a cable, disposed around said first ring and said second ring, such that movement of said first linkage about said first pivot causes said second ring to rotate about said second axel such as to keep the relative position of said second ring with respect to a horizontal plane constant.

4. The arm of Claim 3 wherein said first ring is unable to rotate with respect to a horizontal reference.
5. The arm of Claim 4 wherein said springs are attached to said pivot points via a hole disposed in said rings.
6. The arm of Claim 4 further comprising:
 - a first cable, attached at one end to said first spring and wherein the opposite end of said first cable is wrapped around and unmoveably attached to said first ring;
 - and
 - a second cable, attached at one end to said second spring and wherein the opposite end of said second cable is wrapped around and unmoveably attached to said second ring.
7. The arm of Claim 2 wherein said first axle and said second axle are hollow.
8. The arm of Claim 4 wherein said base and one end of said first linkage are rotatably attached to said first axle and further wherein the other end of said first linkage and one end of said second linkage are rotatably attached to said second axle.
9. The arm of Claim 4 wherein said first and said second linkage are comprised of a hollow sheathing and further wherein said first and said second springs and said first

and said second rings are hidden from view within said hollow sheathings.

10. The arm of Claim 8 further comprising an attachment, said attachment being rotatably attached to the other end of said second linkage.
11. The arm of Claim 10 wherein said attachment is selected from a group consisting of a lamp, a computer monitor, a lab instrument and a microphone.
12. The arm of Claim 10 further comprising an electrical cord for providing electrical power to said attachment, said electrical cord being channeled around said second pivot and wherein said electrical cord has a coiled portion disposed in said first linkage, such that movement of said second linkage with respect to said first linkage cause said coiled portion of said electrical cord to expand and contract.
13. The arm of claim 9 wherein said sheathings are constructed of a material selected from a group consisting of metal and plastic.